

## **SUMMARY OF REGULATION 517/2014**

(covering the most significant changes from Regulation 842/2006)

### **1. HFC PHASE-DOWN (Article 15)**

There is a gradual decrease of maximum quantities (expressed in tonnes of CO<sub>2</sub> equivalent) of HFC to be placed on the EU market by producers and importers, with a freeze in 2015, first reduction step in 2016 and reaching 21% of average levels of tonnes CO<sub>2</sub>-eq sold in 2009-2012 by 2030.

Producers or importers of less than 100 tonnes of CO<sub>2</sub> equivalent of hydrofluorocarbons per year are exempt, but HFCs contained in pre-blended polyols are included.

The phase-down does not apply to:

- (a) HFCs imported into the Union for destruction;
- (b) HFCs used by a producer in feedstock applications or supplied directly by a producer or an importer to undertakings for use in feedstock applications;
- (c) HFCs supplied directly by a producer or an importer to undertakings, for export out of the Union
- (d) HFCs supplied directly by a producer or an importer for use in military equipment;
- (e) HFCs supplied directly by a producer or an importer to an undertaking using it for the etching of semiconductor material or the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector;
- (f) from 1 January 2018 onwards, HFCs supplied directly by a producer or an importer to an undertaking producing metered dose inhalers for the delivery of pharmaceutical ingredients.

There is scope for exemptions from the cap for example if for particular applications, products or equipment, alternatives are not available, or cannot be used for technical or safety reasons; and a sufficient supply of HFCs cannot be ensured without entailing disproportionate costs.

<b>Years</b>	
2015	100 %
2016–17	93 %
2018–20	63 %
2021–23	45 %
2024–26	31 %
2027–29	24 %

2030	21 %
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## 2. EQUIPMENT USE RESTRICTIONS (Article 11)

Only new restrictions compared with F-Gas Regulation 842 (2006) are shown.

<b>Products and equipment</b>		<b>Date of prohibition</b>
Fire protection systems and fire extinguishers containing HFC-23		1 January 2016
Domestic refrigerators and freezers that containing HFCs with GWP of 150 or more		1 January 2015
Refrigerators and freezers for the storage, display or distribution of products in retail and food service ("commercial use") - hermetically sealed systems	containing HFCs with GWP > 2500	1 January 2020
	containing HFCs with GWP >150	1 January 2022
Stationary refrigeration equipment, that contains, or whose functioning relies upon, HFCs with GWP > 2 500 or more except equipment intended for application designed to cool products to temperatures below - 50 °C		1 January 2020
Multipack centralised refrigeration systems for commercial use with a rated capacity of 40 kW or more that contain, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 150 or more, except in the primary refrigerant circuit of cascade systems where fluorinated greenhouse gases with a GWP of less than 1 500 may be used		1 January 2022
Movable room air-conditioning equipment (hermetically sealed equipment which is movable between rooms by the end user) that contain HFCs with GWP of 150 or more		1 January 2020
Single split air-conditioning systems containing less than 3 kg of fluorinated greenhouse gases, that contain, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 750 or more		1 January 2025
Foams that contain HFCs with GWP of 150 or more except when required to meet national safety standards	Extruded polystyrene (XPS)	1 January 2020
	Other foams	1 January 2023
Technical aerosols that contain HFCs with GWP of 150 or more, except when required to meet national safety standards or when used for medical applications		1 January 2018

Note : Restrictions not applicable to equipment for which it has been established in ecodesign requirements adopted under Directive 2009/125/EC that due to higher energy efficiency during its operation, its lifecycle CO<sub>2</sub> equivalent emissions would be lower than

those of equivalent equipment which meets relevant ecodesign requirements and does not contain HFCs.

### **3. Leak Checks (Article 4)**

The obligation to check for leakage is expressed in tonnes CO<sub>2</sub>-eq rather than kg of HFCs (applicable to systems containing at least 5 tonnes CO<sub>2</sub>-eq, with a derogation for equipment with hermetically sealed systems containing less than 10 tonnes CO<sub>2</sub>-eq)

The obligation is extended to refrigerated trucks and refrigerated trailers and organic rankine cycles.

Transitional arrangements apply until 31 December 2016 for the change from kg to CO<sub>2</sub>-eq

### **4. Emissions from production.(Article 7)**

Producers of fluorinated compounds shall take all necessary precautions to limit emissions of fluorinated greenhouse gases, to the greatest extent possible, during production, transport and storage.

This also applies where fluorinated greenhouse gases are produced as by-products.

The placing on the market of fluorinated greenhouse gases and gases listed in Annex II shall be prohibited unless, where relevant, producers or importers provide evidence, at the time of such placing, that trifluoromethane, produced as a by-product during the manufacturing process, including during the manufacturing of feedstocks for their production, has been destroyed or recovered for subsequent use, in line with best available techniques. This requirement shall apply from 11 June 2015.

### **5. Use and servicing Bans (Article 13)**

From 1 January 2018, the use ban of SF<sub>6</sub> in magnesium die-casting and in the recycling of magnesium die-casting alloys will be extended to installations using a quantity of SF<sub>6</sub> lower than 850 kg/year.

From 1 January 2020, there will be a ban of servicing existing refrigeration equipment with a charge size over 40 tonnes of CO<sub>2</sub> equivalent with HFC of GWP >2500. There are exemptions for

-military equipment or equipment intended for applications designed to cool products to temperatures below - 50 °C.

and until 1 January 2030

-reclaimed fluorinated greenhouse gases with a global warming potential of 2 500 or more used for the maintenance or servicing of existing refrigeration equipment, provided that they have been labelled in accordance with Article 12(6);

-recycled fluorinated greenhouse gases with a global warming potential of 2 500 or more used for the maintenance or servicing of existing refrigeration equipment provided they have been recovered from such equipment and used by the undertaking which carried out their recovery or the undertaking for which the recovery was carried out.

### **6. Pre-charging of equipment with HFCs (Article 14)**

From 1 January 2017 refrigeration, air conditioning and heat pump equipment charged with HFCs shall not be placed on the market unless the HFCs charged into the equipment are accounted for within the quota system.

Compliance shall be fully documented and requires a declaration of conformity in this respect.

From 1 January 2018, where the HFCs contained in the equipment have not been placed on the market prior to the charging of the equipment, importers of that equipment shall ensure that by 31 March every year the accuracy of the documentation and declaration of conformity is verified, for the preceding calendar year, by an independent auditor.

### **7. Allocation of Quotas (Article 16)**

Quotas of quantities put on the market will be allocated to producers and importers having reported data under Article 6 of the F-Gas regulation from 2009 to 2012, with provisions for new entrants.

By 31 October 2017 and every three years thereafter, the Commission shall recalculate the reference values for the producers and importers on the basis of the annual average of the quantities of HFCs placed on the market from 1 January 2015.

### **8. Registry (Article 17)**

There will be an electronic registry for quotas for placing HFCs on the market.

Registration in the registry shall be compulsory for the following:

- producers and importers allocated a quota, undertakings to which a quota is transferred and new entrants.
- producers and importers supplying, or undertakings in receipt of HFCs for exempted uses.
- importers of equipment placing pre-charged equipment on the market.

### **9. Reporting (Article 19)**

Additional reporting obligations for F-gases not covered by the previous regulation, for pre-charged equipment, and feedstock users. Verification is required for producers and importers placing more 10,000 tonnes CO<sub>2</sub>e on the market.

### **10. Review (Article 21)**

There are several review elements including:

By 31 December 2020, the Commission shall publish a report on the availability of hydrofluorocarbons on the EU market.

By 31 December 2022, the Commission shall publish a comprehensive report on the effects of this Regulation, including a forecast of the continued demand for HFCs up to and beyond 2030.